

**United States House of Representatives  
Committee on Appropriations  
Project Request Summary**

**Subcommittee, Agency and Account Information**

**Subcommittee**

Defense

**Agency**

Research, Development, Test And Evaluation, Defense-Wide (RDTE,DW)

**Account**

17 (0602670D8Z) Human, Social and Culture Behavior Modeling (HSCB) Applied Research

**Project Information**

**Project Name:**

Neuromechanics Research for Spinal Cord Injury

**Amount Requested:**

\$700,000

**Project Description:**

RIC's proposed study will test the effects of a combination of selective serotonin reuptake inhibitors (SSRIs) and walking training injury on recovery of strength and stepping ability. This novel approach is in stark contrast to the way drugs are currently used in the clinical setting and may dramatically alter the treatment and recovery of our nation's heroes.

**Intended Recipient of Funds**

Rehabilitation Institute of Chicago

345 E. Superior Street

Chicago, IL 60611

**Explanation of the request:**

An intervention that offers great potential to enhance recovery is the use of specific drugs in combination with intensive walking training. In particular, a specific chemical (neurotransmitter) called serotonin exists in the brain and spinal cord and greatly influences motor activity and stepping ability. The loss of serotonin, which occurs after SCI, can suppress strength and locomotion. Replacement of serotonin may augment motor recovery following SCI, with research strongly supporting the use of these agents. However, serotonin alone does not nearly facilitate the improvements in walking ability as well as a combination of serotonin and walking training.